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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|-----------------|----------------------|-------------------------|-------------------------|--|
| 10/600,864 | 06/20/2003 | James D. McGlothlin | 13054-207A | 6651 | |
| 32841 | 7590 11/02/2005 | | EXAMINER | | |
| | ASSOCIATES | | POLYZOS, FAYE S | | |
| SUITE 510 | MERIDIAN STREET | | | PAPER NUMBER | |
| INDIANAPO | LIS, IN 46204 | | | | |
| | | | DATE MAILED: 11/02/2005 | DATE MAILED: 11/02/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | |
|---|--|---|--|--|
| • | 10/600,864 | MCGLOTHLIN ET AL. | | |
| Office Action Summary | Examiner | Art Unit | | |
| | Faye Polyzos | 2884 | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet wi | h the correspondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNION (36(a). In no event, however, may a rewill apply and will expire SIX (6) MON, cause the application to become AB | CATION. Seply be timely filed ITHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133). | | |
| Status | | • | | |
| 3) Since this application is in condition for allowar | action is non-final. nce except for formal matt | · • | | |
| closed in accordance with the practice under E | x paπe Quayle, 1935 C.D | . 11, 453 O.G. 213. | | |
| Disposition of Claims | | | | |
| 4) Claim(s) 1-8,10 and 11 is/are pending in the appearance of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-3,5,7 and 8 is/are rejected. 7) Claim(s) 4,6,10 and 11 is/are objected to. 8) Claim(s) are subject to restriction and/or | wn from consideration. | | | |
| Application Papers | | | | |
| 9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 20 June 2003 is/are: a) Applicant may not request that any objection to the conference of th | D⊠ accepted or b) obje drawing(s) be held in abeyar ion is required if the drawing | ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d). | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| Attachment(s) | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s | ummary (PTO-413))/Mail Date formal Patent Application (PTO-152) | | |

Application/Control Number: 10/600,864 Page 2

Art Unit: 2884

DETAILED ACTION

Comment on Submissions

1. This communication is responsive to submissions 22 August 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al (US 6,633,327 B1).

Regarding claim 1, Williams discloses a real-time video radiation exposure monitoring system (10), comprising: a radiation detector; a video camera (12); a radio modem (16) having a transmitter and receiver, the transmitter having an input connected to the radiation detector; a computer (32) coupled to the receiver and the video camera and programmed to display video images from the camera simultaneously with data from the radiation detector (See Fig. 1 and Abstract and col. 4, lines 12-64).

Regarding claim 2, Williams discloses a video converter (50) having an input connected to the video camera (12) and an output connected to the computer (32) (col. 4, lines 28-38 and lines 45-53).

Application/Control Number: 10/600,864 Page 3

Art Unit: 2884

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3, 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US 6,633,327 B1 and Murdock (6,388,259 B1).

Regarding claim 3, Williams discloses a real-time video radiation exposure monitoring system (10) comprising: a wireless transmitting means for transmitting data to the computer (32); and a video camera (linked to the computer (32), wherein the computer is programmed to display video images from the camera simultaneously (Fig. 1 and col. 3, lines 38-53 and col. 4, lines 51-64). Williams does not specifically disclose of a Geiger-Muller tuber or an A/D converter connected to the Geiger-Mueller tube. Murdock discloses an A/D converter (32) having an input connected to a radiation detector (30) (i.e. Geiger Mueller tube) wherein the display video images from the camera are displayed with data from the radiation detector (30). Murdock teaches in order to detect radiation, radiation detection devices must be utilized since radiation cannot be sensed by sight, smell, or taste and a commonly known radiation detector is a Geiger counter wherein the device's electronics count the number of conductive pulses incident upon the tube per unit time as a measure of the radiation level (col. 1, lines 61-67 and col. 2, lines 1-3). Therefore, it would have been obvious to modify the

Application/Control Number: 10/600,864

Art Unit: 2884

apparatus suggested by Williams to include a radiation detector such as a Geiger Muller tube, as disclosed supra by Murdock, to allow for a more versatile apparatus.

Regarding claim 5, Williams discloses the system further comprising means (16) connected between the video camera (12) and the computer (32) for capturing video images from the video camera (col. 2, lines 59-67).

Regarding claim 7, Williams discloses the wireless transmitting means includes a radio modem (See Fig. 1 and Abstract and col. 4, lines 28-39).

Regarding claim 8, Williams discloses a method of assessing radiation exposure, comprising: measuring radiation in an area of a workplace with a radiation detector, converting radiation readings with a converter; obtaining video images of the area as the measuring step is performed; supplying radiation data from the radiation detector to a computer by transmitting data to the computer over a wireless link; supplying video images to the computer (32); and displaying the radiation data and video images simultaneously on a display screen (46) (col. 3, lines 37-45 and col. 4, lines 5-27 and lines 51-64). Williams does not specifically disclose supplying radiation data from a Geiger-Mueller meter to a computer by transmitting digital data to the computer. Murdock discloses an A/D converter (32) having an input connected to a radiation detector (30) (i.e. Geiger Mueller tube) wherein the display video images from the camera are displayed with data from the radiation detector (30). Murdock teaches in order to detect radiation, radiation detection devices must be utilized since radiation cannot be sensed by sight, smell, or taste and a commonly known radiation detector is a Geiger counter wherein the device's electronics count the number of conductive

Application/Control Number: 10/600,864 Page 5

Art Unit: 2884

pulses incident upon the tube per unit time as a measure of the radiation level (col. 1, lines 61-67 and col. 2, lines 1-3). Therefore, it would have been obvious to modify the apparatus suggested by Williams to include a radiation detector such as a Geiger Muller tube, as disclosed supra by Murdock, to allow for a more versatile apparatus.

Allowable Subject Matter

6. Claims 4, 6 and 10-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding dependent claims 4 and 10, the prior art does not disclose or fairly suggest of a variable-sensitivity meter circuit connected between the Geiger-Muller tube and the A/D converter, and means for encoding the sensitivity setting of the meter circuit and supplying the encoded sensitivity setting to a wireless transmitting means.

Regarding dependent claims 6 and 11, the prior art does not disclose or fairly suggest of a system or method of assessing radiation exposure comprising the step of adapting the Geiger-Mueller meter for digital output by connecting a RISC microcontroller with an internal A/D converter to an output of the analog electrical circuit.

Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Polyzos whose telephone number is 571-272-

Art Unit: 2884

2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FP

OTILIA GABOR PRIMARY EXAMINER